

## CLAIMS

What is claimed is:

1. A carbide component for a boring tool, said carbide component comprising:
  - a body portion comprising carbide, said body portion having a first end adapted for being seated in said boring tool and a second, working, end;
  - 5 wherein said second end of said compact has an outer layer which is attached to said body without a transition layer or adherent material and which contains an ultra-hard material.
2. The carbide component of Claim 1, wherein said carbide component has a binder content of less than 13%.
3. The carbide component of Claim 1, wherein said carbide component has a binder content of less than 11%.
4. The carbide component of Claim 1, wherein said carbide component is a hemispherical insert.
5. The carbide component of Claim 1, wherein said ultra-hard material is bare diamonds.

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6. A drilling tool, comprising:
  - a first end adapted for attachment to a drill string;
  - a second end, opposite said first end, containing at least one carbide component, said carbide component comprising
    - 5 a body portion comprising carbide, said body portion having a first end adapted for being seated in said drilling tool and a second, working, end;
    - 10 wherein said second end of said carbide component has an outer layer which is attached to said body without a transition layer or adherent material and which contains an ultra-hard material.
7. The bit of Claim 6, wherein said carbide component has a binder content of less than 13%.
8. The bit of Claim 6, wherein said carbide component has a binder content of less than 11%.
9. The bit of Claim 6, wherein said carbide component is a hemispherical insert.
10. The bit of Claim 6, wherein said ultra-hard material is bare diamonds.

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11. A drill rig, comprising:  
a drill string containing at least one section of pipe;  
a drilling tool connected to said drill string and containing at least  
one carbide component; and  
5 surface equipment capable of rotating said drill string and said  
drilling tool;  
wherein said carbide component comprises a body portion of  
carbide and an outer layer which is attached to said body  
without a transition layer or adherent material and which  
10 contains an ultra-hard material.
12. The rig of Claim 11, wherein said carbide component has a binder  
content of less than 13%.
13. The rig of Claim 11, wherein said carbide component has a binder  
content of less than 11%.
14. The rig of Claim 11, wherein said carbide component is a  
hemispherical insert.
15. The rig of Claim 11, wherein said ultra-hard material is bare  
diamonds.

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16. A fabrication method for a carbide component, comprising the steps of:
- 5 forming a body portion comprising tungsten carbide;  
sintering said body portion sufficiently to permit handling of said  
body portion for further processing;
- 10 applying a coating to a working surface of said body portion, said coating comprising an ultra-hard material;  
after said applying step, subjecting said body portion and said coating to a high-temperature, high-pressure process to form a finished carbide component;
- installing said finished carbide component in a drilling tool.
17. The method of Claim 16, wherein said ultra-hard material is bare diamonds.
18. The method of Claim 16, wherein said coating is approximately 0.010" thick.
19. The method of Claim 16, wherein said body portion has a binder content of less than 13%.
20. The method of Claim 16, wherein said carbide component has a binder content of less than 11%.